11 Job Responsibilities

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CHAPTER ELEVEN:
JOB RESPONSIBILITIES

It is imperative that all persons in the chain of command at the processing plant be aware of their responsibilities and how they fit into the overall manufacturing process. As problems occur in the process, it is important that each individual in the system perform in a professional manner to insure the final result is a quality product.

TIME MANAGEMENT

The Certified Aggregate Technician may be responsible for more than one plant. Therefore, the technician and supervisor should know how much time is involved for conducting tests and the travel time between plants before writing the Quality Control Plan. Job duties other than quality control also will need to be addressed.

TIME CONSUMING ACTIVITIES

The approximate times for the various required duties include:

ACTIVITY	EXPENDED TIME
Meeting with management to receive production information.	1 to 3 hours or more
Notifying the persons involved with process of sampling.	5 minutes to 1 hour
Sampling the material per size.	5 minutes to 1 hour or more
53's, 73's, and B borrow from splitting, drying, decant, drying, calculation, and charting per size.	3 hours or more

ACTIVITY	EXPENDED TIME
5's, 8's, 9's, 11's, 12's and fine aggregates from splitting, drying, decant, drying, calculation, and charting per size.	1 hour or more
Checking problems in the plant that may have caused a gradation problem.	1 hour or more
Checking the quality control in the pit daily	1 hour or more
Notifying supervisor of any problems	5 minutes to 1 hour or more
Travel time	5 minutes to 1 hour; more than 1 hour will affect test time
Diaries	5 minutes to 1 hour
Cleaning lab	30 minutes to 1 hour

EXAMPLE SCHEDULE

Every morning or at the beginning of the shift, the technician should meet with the supervisor to schedule the production and stockpile testing. The mining area the material is being produced, and if the material must meet any special requirements are necessary to know.

If process control is maintained at one or more locations, a time schedule should be established to meet the testing frequency of products at each location.

Example of a Typical Day	
1.	Meet with supervisor to receive production information.
2.	Notify the persons involved with the process of sampling from production or stockpile (plant operator, stockpile driver, loader operator).
3.	Sample the material using the approved method and equipment
4.	Check stockpiles for any contamination or segregation problems, and check the mining area to make sure what material is being produced and what quality control procedures are being followed.
5.	Record all the sample information in the log book and start testing procedures.
6.	Notify the supervisor of any failures and make copies of gradation analysis for customer, supervisor, and file.
7.	Plot all test results on the control charts and perform statistical analysis before the end of the day.
8.	Maintain a daily file on all tests performed and keep a clean and orderly lab.

Day-to-day operations may be interrupted by unexpected occurrences, such as customer relations, special requests, writing reports, or working with INDOT personnel.

FREQUENCY OF SAMPLING AND TESTING

The most time consuming activity required by the CAPP will be the sampling and testing of the aggregates.

Each Plant/Redistribution Terminal is required to determine the frequency of sampling and testing based on the control required to assure that the customer is obtaining the product specified.

The term certified material is defined as a product produced under the CAP Program intended for INDOT use. A frequency is required to be established for each certified material in the Quality Control Plan.

GRADATION

The minimum frequencies of sampling and testing for gradation include three time periods: Start of Production, Normal Production, and Load-out.

The minimum requirement for sampling and testing a certified material during Start of Production is:

1) One test per 1000 t for the first 5000 t produced; and

2) A maximum of two per calendar day.

The minimum requirement for sampling and testing a certified material during Normal Production is:

1) One test per 2000 t; and

2) A maximum of two per calendar day.

The minimum requirement for sampling and testing a certified material during Load-out is:

1) One test per 8000 t shipped; and

2) A minimum of one test per month for any certified material shipped that exceeds 1000 t.

DECANTATION

All load-out samples shall be decanted. Unless specific problems are encountered, start of production and normal production samples need not be decanted.

CRUSHED PARTICLES

The minimum requirement for determining the amount of crushed particles is one test per week for each size of material during start of production and normal production. No test is required if the week's production is less than 100 t.

DELETERIOUS MATERIALS

The minimum requirement for determining the percentage of deleterious materials is one test per week for each size of material during the start of production and normal production. No test is required if the week's production is less than 100 t.

ADDITIONAL TESTS

The exact frequency of sampling and testing is source specific and is required to be defined in the Quality Control Plan.

Each Plant/Redistribution Terminal may conduct additional tests to maintain control of their operation. More testing can provide an additional assurance that the product being shipped is within the controls established.

DIARY REQUIREMENTS

Each Plant/Redistribution Terminal is required to maintain a diary. Test reports do not substitute for a diary. The diary shall be an open-format book with at least one page devoted to each day that there is a material related operation. Entries into the diary shall as a minimum include:

1) General weather conditions;

2) Area of extraction-location and ledges or pit area;

3) Estimated quantity of materials produced;

4) Time test samples obtained and tested, and corrective action if there were problems;

5) Changes in key personnel, if any;

6) Changes in equipment, plant, screens, etc., which may affect the current statistical results of aggregate materials;

7) Any significant events or problems; and

8) Any nonconforming condition, as well as the action taken to correct the condition, if needed.

The diary entry is to be routinely signed each day by the Certified Aggregate Technician or Management Representative. On occasion it may be signed by another person; however, it must then be counter-signed by the Certified Aggregate Technician or Management Representative. Examples of diaries are shown on the following pages.

CAPP DIARY

LOCATION: DATE: _____ START: _____

INDOT #: CAPP #: _____ STOP: _____

WEATHER: _____ DOWN DATES: _____

IDLE TIME: _____ (HOLIDAYS), _____ (WEEKENDS)

GRID: _____ : _____

SAMPLES PULLED

SIZE	TYPE *	TIME

TONS PRODUCED TODAY AND MONTHLY RUNNING TOTALS (MRT)

SIZE											TOTAL
TONS											
MRT											

SUPERINTENDENT'S (OR REPRESENTATIVE) REMARKS

CHANGES – PLANT, GRID, KEY PERSONNEL, ETC: _____

_____

_____

EVENTS – PROBLEMS WITH PLANT, SCREENS, EQUIPMENT, ETC; _____

_____

_____

_____

_____

_____

_____

_____

_____ (INITIALS _____)

***SAMPLE TYPES**

S = START UP FREQUENCY

N = NORMAL FREQUENCY

L = LOAD-OUT FREQUENCY

M = MISC.

R = RESAMPLE

CERTIFIED AGGREGATE TECHNICIAN'S REMARKS _____

_____

_____

_____

_____

_____

_____ / _____

(NAME - PRINTED) (SIGNATURE)

FN: DIARY355

CAPP DIARY - ADDITIONAL REMARKS

SOURCE #: DATE:

SUPERINTENDENT'S (OR REPRESENTATIVE) REMARKS – CONTINUED

( )
INITIALS

CAT'S REMARKS - CONTINUED

/
(PRINTED NAME) (SIGNATURE)

08/95

AGGREGATE TECHNICIAN PLANT DIARY

COMPANY:					
SOURCE & Q #:					
DATE:	MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY SUNDAY				
WEATHER:	CLOUDY, SUNNY, RAIN, THUNDER STORM, SNOW, COOL, COLD, WARM				
MATERIAL PRODUCED & TONS:					
VISUAL INSPECTION: TIME:/ INITIAL	1 ST VISIT 7AM	2ND VISIT 9:45AM	3RD VISIT 12:55PM	4TH VISIT 3:00PM	START - UP TIME
STOCKPILE/LOADOUT:					
DEGREDATION	YES/NO	YES/NO	YES/NO	YES/NO	SHUT-DOWN TIME
SEGREGATION	YES/NO	YES/NO	YES/NO	YES/NO	
CONTAMINATION	YES/NO	YES/NO	YES/NO	YES/NO	
LEDGE/LIFT:	PLANT CHANGES:				
SHOT LOCATION:					
PIT AREA:					

SAMPLES PULLED PRODUCTION:				OBTAINED DATE:	OBTAINED TIME:	COMPLETED DATE:	COMPLETED TIME:	PASS/FAIL COMMENTS:
1000 / 2000	LAB #	FREQ	SIZE					
FREQUENCY								
S = START-UP								
N = NORMAL								
I = INFO								
A=AUDIT								
LOADOUT:								
8000								
RESAMPLE:								

PROBLEMS:/ ACTION TAKEN AND CHANGES IN PLANT OR KEY PERSONNEL:	SIGNATURE
	AUDIT SAMPLED BY

TOTAL WEIGHT		GRAMS	LBS.	Report No.		Contract No.		RS 4-95

SIEVE SIZE	LONG GRAD. WEIGHT RET.	WEIGHT RETAINED	WEIGHT PASSING	PERCENT PASSING	CONTROL LIMITS	CUSTOMER SPECS.
3" (75 mm)						
2 1/2" (63 mm)						
2" (50 mm)						
1 1/2" (37.5 mm)						
1" (25 mm)						
3/4" (19 mm)						
1/2" (12.5 mm)	P / F					
3/8" (9.5 mm)						
No. 4 (4.75 mm)						
No. 6 (3.35 mm)						
No. 8 (2.36 mm)						
No. 12 (1.70 mm)						
No. 16 (1.18 mm)						
No. 20 (850 um)						
No. 30 (600 um)						
No. 50 (300 um)						
No. 60 (250 um)						
No. 80 (180 um)						
No. 100 (150 um)						
No. 140 (106 um)						
No. 200 (75um)						
No. 270 (53 um)						
No. 325 (45 um)						
PAN	ORIGINAL	FINAL	GRAMS LOSS	% LOSS		
DECANT						

SOUTHERN INDIANA STONE CO.

SAMPLE FROM | PLANT

TEST NO. | LOCATION

LEDGES | SHOT LOCATION #

OBTAINED DATE Mo. Day | TIME OBTAINED

COMPLETED DATE Mo. Day | TIME COMPLETED

MATERIAL | Moisture (CAS) (CAB) % | FREQUENCY ☐ START-UP ☐ NORMAL

SPECIFICATION | 93 - 1993 95 - 1995 SP - SPEC. PROV. | PURPOSE | 73 - JOB CONTROL 75 - INFORMATION

SAMPLED BY | SUPERINTENDENT | TONS REP. BY TEST PR. ☐ SP. ☐ | YES - 3

DELETERIOUS TESTS PERFORMED | NO - 4

MATERIAL STATUS K2 ACCEPTED K6 REJECTED K7 VISUAL L1 INFO | WEATHER

QUALITY CHECKS AND CORRECTIVE ACTION	MATERIAL PRODUCED	MATERIAL SAMPLED
TOO FINE		
TOO COARSE		
CRUSHER SETTINGS		
JAW SETTING		
SCREEN CHANGES		
SEGREGATION		
CONTAMINATION		
WASH SAMPLE		
	LEDGE AND STOCKPILE INSPECTION TIMES	
DRY SHAKE	AM	PM
RESAMPLE	AM	PM

NON-DURABLE	TOTAL WT. 3/8" UP	WT. OF NON-DUR.	% NON-DUR.
AGG SIZE 5, 8, 57, 53, 73			
TOTAL CHERT	SAMPLE WT. 3/8" UP	WT. OF TOT CHERT	% TOTAL CHERT
AGG SIZE 5, 8, 57, 53, 73			
MECH. CRUSHED	SAMPLE WT. NO. 4 UP	WT. OF MECH. CRUSHED PT.	% MECH. CRUSHED

LONG GRADED MATERIAL	TOTAL WT. PASS No. 4	SAMPLE SIZE	PROPORT. FACTORS
	GM	GM	
TOTAL CHERT	SAMPLE WT. No. 4 UP	WT. OF TOTAL CHERT	% TOTAL CHERT
AGG. SIZE 9, 11			
TOTAL CRUSHED	SAMPLE WT. No. 4 UP	WT. TOTAL CRUSHED	% TOTAL CRUSHED

AUDIT SAMPLED BY

1. Stock/Stockpile
2. Bin or Tank
3. Processing Equipment
4. Truck, Barg, or Car
5. Inplace, Jobsite
6. Ledge or Pit
7. Customer Yard

REMARKS